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EXAMINER

LY, NGHI H

ART UNIT

PAPER NUMBER

2686

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,861

Applicant(s)

PHAN-ANH ET AL.

Examiner

Nghi H. Ly

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho (US 6,097,942) in view of Kage (US 5,463,672).

Regarding claims 1, 5, 8 and 12, Laiho teaches a method of recovering location information of a subscriber in a mobile network (see column 3, lines 19-22), the method comprising: forwarding a registration request from the subscriber to an S-CSCF (Serving-Call State Control Function) including subscriber's identifier (column 10, lines 8-31, see "location registration request" and see "including the mobile station IMSI

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identifier”), forwarding a location update from the S-CSCF to an HSS (Home Subscription Server) (also see column 10, lines 8-31, see “location update information to the HLR”) including the S-CSCF address (see column 5, lines 63-67 and see column 6 line 65 to column 7 line 7), and storing data including the subscriber's in the HSS so as to be protected against loss (see column 2, lines 42-55).

Laiho does not specifically disclose a registration request from the subscriber to an S-CSCF (Serving-Call State Control Function) including subscriber's TA (Transport Address) and a location update including the subscribers TA.

Kage teaches a registration request from the subscriber to an S-CSCF (Serving-Call State Control Function) including subscriber's TA (Transport Address) (see column 2, lines 9-16) and a location update including the subscribers TA (see column 5, lines 27-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kage into the system of Laiho in order to provide a personal mobile telephone system that is low cost and automatically establish a full-duplex connection (see Kage, column 1, lines 45-48).

Regarding claims 2 and 9, the combination of Laiho and Kage further teaches upon the S-CSCF losing data, lost data including the subscriber's TA (see Kage, column 5, lines 27-34) may be restored to the S-CSCF from the data stored in the HSS (see Laiho, column 3, lines 19-25).

Regarding claims 3 and 10, Laiho further teaches storing data in the HSS comprises storing data in a non-volatile memory in the HSS (see column 12, lines 11-15).

Regarding claims 4, 7, 11 and 14, Laiho further teaches storing data in a nonvolatile memory in the HSS comprises storing data in a hard disk drive (see column 12, lines 11-15 see "hard disk").

Regarding claims 6 and 13, the combination of Laiho and Kage further teaches upon the S-CSCF losing data (see Laiho, column 3, lines 19-25), lost data including the subscriber's TA (see Kage, column 5, lines 27-34) may be restored to the S-CSCF from the data stored in a nonvolatile memory in the S-CSCF (see column 12, lines 11-15).

4. Claims 15, 19, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho (US 6,097,942) in view of Lindgren et al (US 6,411,632).

Regarding claims 15, 19, 21 and 25, Laiho teaches a method of recovering location information of a subscriber in a mobile network (see column 3, lines 19-22), the method comprising: upon an S-CSCF (Serving-Call State Control Function) receiving a call setup request for the subscriber from an I-CSCF (Interrogating-Call State Control Function) (see column 10, lines 8-31), forwarding a route request to a UMS (User Mobility Server) and receiving a home address of the subscriber (also see column 10, lines 8-31), forwarding the call setup from the S-CSCF to a home agent at the home address of the subscriber (also see column 10, lines 8-31) and forwarding an address update from the subscriber to the S-CSCF (also see column 10, lines 8-31).

Laiho does not specifically disclose forwarding the call setup request from the home agent to the subscriber.

Lindgren teaches forwarding the call setup request from the home agent to the subscriber (see column 5, lines 27-34 and see fig.4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Lindgren into the system of Laiho in order to improve communication system utilizing a network hub and enable calls from the public network to be directed to the wireless office serving a mobile station (see Lindgren, column 2, lines 10-12 and see column 2, lines 36-39).

5. Claims 16-18, 20, 22-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laiho (US 6,097,942) in view of Lindgren et al (US 6,411,632) and further in view of Inoue et al (US 6,587,882).

Regarding claims 16, 22 and 26, the combination of Laiho and Lindgren teaches the method of claims 15, 21 and 25. The combination of Laiho and Lindgren does not specifically disclose forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care-Of Address of the subscriber.

Inoue teaches forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care-Of Address of the subscriber (see column 19, lines 29-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Inoue into the system of Laiho and Lindgren so that the mobile computer device can carry out communications while moving over inter-connected networks such as Internet or Intranet (see Inoue, column 3, lines 44-47).

Regarding claims 17, 18, 20, 23, 24, 27 and 28, the combination of Laiho, Lindgren and Inoue further teaches forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber (see Inoue, column 19, lines 29-35).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Mallia (US 5,077,830) teaches method and apparatus to selectively address recipients and recover missing message on a broadcast distribution network.

b. Stephens (US 6,600,920) teaches method of and system for delivering wireless calls.

c. Kari (US 6,636,491) teaches access control method for a mobile communications system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Nghi H. Ly

1666
11/17/03


CHARLES APPIAH
PRIMARY EXAMINER